

AMENDMENTS TO THE DRAWINGS

The attached replacement sheets of drawings include changes to FIGS. 2 and 4. The attached replacement sheets containing FIGS. 2 and 4 replace the original sheets including FIGS. 2 and 4 presently on file in the subject application. FIGS. 2 and 4 have been amended to show a sum signal. These changes to the drawings are being made in response to an objection to the same in the Office Action. These drawing changes do not introduce new matter.

REMARKS

Applicant requests reconsideration and allowance of the present application in view of the foregoing amendments and the following remarks.

Claims 1-3, 5-8, 10-15, 17-20, and 22 are pending in the present application. Claims 1, 6, 10, 11, 17, and 22 are the independent claims.

Claims 4, 9, 16, and 21 have been cancelled without prejudice to or disclaimer of the subject matter recited therein. Claims 1, 6, 10, 11, 17, and 22 have been amended. No new matter has been added.

The Office Action objected to the drawings for the absence of "sum signal ABCD." However, a review of the claims reveals that no such feature is claimed. Nonetheless, in response, Applicant submits concurrently herewith Replacement Drawing Sheets with amended FIGS. 2 and 4 showing the recited "sum signal."

Favorable consideration is respectfully requested.

Claims 4, 9, 16, and 21 were rejected under 35 U.S.C. § 112, first paragraph, as not enabled.

It is to be appreciated that while these claims have been cancelled, features based on these claims have been added to the independent claims. Applicant respectfully submits that these added features are enabled by the specification as originally filed, for at least the following reasons.

The Office Action contends that the specification "does not explain what [the signals A-D] are and what their generation depends upon and also how they related to each other and more importantly to different parameters." (Office Action, page 2). Thus, the Office Action contends that the subject features are not enabled because the specification allegedly does not explain:

- (1) what these signals are;
- (2) what their generation depends upon;
- (3) how they are related to each other;
- (4) how they relate to different parameters.

Each ground is addressed in turn.

Initially, Applicant notes the well-settled principle that a claimed invention is enabled when one of ordinary skill in the art to practice the claimed invention without undue

experimentation. What constitutes unreasonable experimentation is determined based on reasonableness in view of, among other factors, the predictability of the relevant art. Further, a patent need not teach that which is well known in the art. (See, Manual of Patent Examining Procedure, § 2164.)

At least paragraphs [0047] and [0060] of the specification, for example, explain that an offset measuring unit measures an ABCD sum signal that represents voltage values output from a photo diode. (Emphasis added). Thus, it is respectfully submitted that the specification explains that the signals A-D are voltage values output from a photo diode. Further, it is respectfully submitted that one of ordinary skill in the art would understand this from the specification without experimentation.

Applicant respectfully submits that one of ordinary skill in the art would also understand that a photo diode can serve as a photodetector and as such outputs voltages in response to received light. Further, at least paragraphs [0044] and [0056] of the specification explain that the light received by the photo diode is laser light reflected from an optical disk. Thus, it is respectfully submitted that the specification does in fact explain on what generation of signals A-D depend.

At least paragraphs [0047] and [0060] of the specification explain that each of signals A-D are voltage signals output from a photo diode. This is how these signal are related.

Lastly, regarding the contention that the specification must explain to which parameters the signals A-D relate, Applicant respectfully disagrees. A review of cancelled claims 4, 9, 16, and 21 reveals that no such interrelation between signals A-D and parameters is recited. What is recited is that one or more offset parameters correspond to, among other conditions, a sum signal of 4 signals output from a photo diode. Further, this recitation is enabled by the specification as explained above.

Accordingly, it is respectfully submitted that subject features added by the present Amendment to independent claims 1, 6, 10, 11, 17, and 22 fully satisfy the requirements of the first paragraph of 35 U.S.C § 112.

Claims 4, 9, 16, and 21 were rejected under 35 U.S.C. § 112, second paragraph, as indefinite.

It is to be appreciated that while these claims have been cancelled, features based on these claims have been added to the independent claims. Applicant respectfully submits that these features are sufficiently definite, for at least the following reasons.

Specifically, the Office Action contends that it is unclear how signals A-D are generated, and how they relate to each other. (Office Action, page 2). However, as explained above, the specification explains that signals A-D are voltages output from a photo diode in response to light received by the photo diode. Independent claims 1, 6, 10, 11, 17, and 22 recite these features. As for any alleged ambiguity of the interrelation of signals A-D, it is respectfully submitted that since such an interrelation is not recited, this ground for this rejection cannot stand.

Accordingly, it is respectfully submitted that subject features added by the present Amendment to independent claims 1, 6, 10, 11, 17, and 22 fully satisfy the requirements of the second paragraph of 35 U.S.C. § 112.

Claims 1, 3, 5-8, and 10 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,252,835 (Choi). Claims 2, 11-15, 17-20, and 22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Choi in view of U.S. Patent No. 5,457,587 (Suzuki). Claims 1-3, 5-8, 10-15, 17-20, and 22 also stand rejected under 35 U.S.C. §103(a) as being unpatentable over Choi in view of U.S. Patent No. 5,600,615 (Kiyoura et al.). All rejections are respectfully traversed.

Independent claims 1, 6, 10, 11, 17, and 22 recite, inter alia, that one or more offset parameters correspond to a sum signal ... and that the sum signal is a sum of signals A, B, C, and D, which signals are discrete voltages output by a photo diode (PD) based on amounts of reflected laser light from the optical disc received by portions of the PD in an optical pickup of the DVD player.

However, Applicant respectfully submits that the cited art, alone or in combination, does not teach or suggest at least the aforementioned features. Thus, without conceding the propriety of the asserted combinations, it is respectfully submitted that the asserted combinations are likewise deficient, even in view of the knowledge of one of ordinary skill in the art.

The primary citation to Choi relates to an apparatus for automatically adjusting a focus offset and method thereof in a disc player and describes an arrangement including a microcomputer 507. The microcomputer measures offset parameters.

The Office Action contends that the microcomputer 507 is both an offset measuring unit and an offset setting unit. (Office Action, page 3). However, even if it is assumed that this characterization is not incorrect, absent from Choi is any teaching of any offset parameter

corresponding to a sum signal that is a sum of four signals output by a photo diode. Thus, the microcomputer of Choi cannot meet the aforementioned features of independent claims 1, 6, 10, 11, 17, and 22.

Accordingly, favorable reconsideration and withdrawal of the rejection under 35 U.S.C. § 102 are respectfully requested.

Regarding the rejections under 35 U.S.C. § 103, the secondary citations to Suzuki and Kiyoura et al. respectfully relate to a method and system for correcting an offset of ahead position signal and to a device and method for automatically controlling a servo loop gain. Suzuki and Kiyoura et al. are cited for their alleged disclosures of various features of various independent and dependent claims. Applicant respectfully submits that neither Suzuki nor Kiyoura et al. add disclose anything that remedies the aforementioned deficiency in Choi.

Accordingly, favorable reconsideration and withdrawal of the rejections under 35 U.S.C. § 103 are respectfully requested.

Lastly, Applicant respectfully disagrees with the contention that “the process or re-measuring and using a counter of [sic] for reiteration is well known in the art for a while.” (Office Action, page 4). Applicant respectfully requests, if this contention is an attempt at Official Notice, that the Office so state.

In view of the foregoing, Applicant respectfully submits that the independent claims patentably define the present invention over the citations of record. Further, the dependent claims should also be allowable for the same reasons as their respective base claims and further due to the additional features that they recite. Separate and individual consideration of the dependent claims is respectfully requested.

Applicant believes that the present Amendment is responsive to each of the points raised by the Examiner in the Official Action. However, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to such matters.

There being no further outstanding objections or rejections, it is submitted that the present application is in condition for allowance. An early action to that effect is courteously solicited.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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